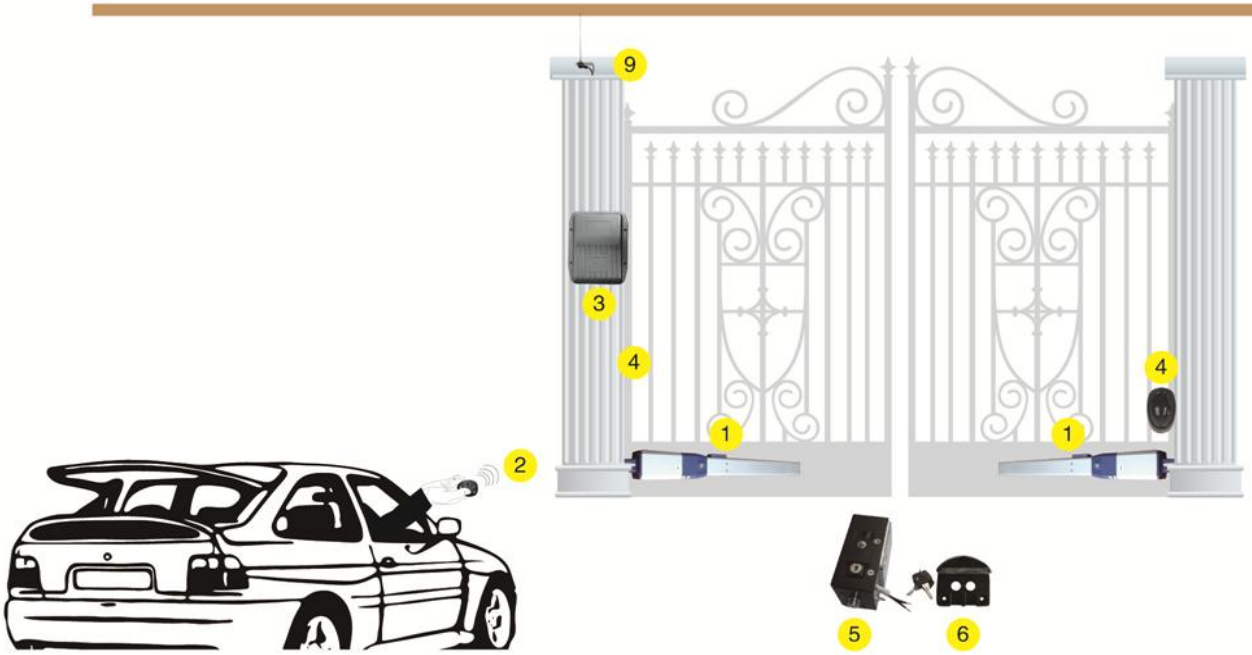
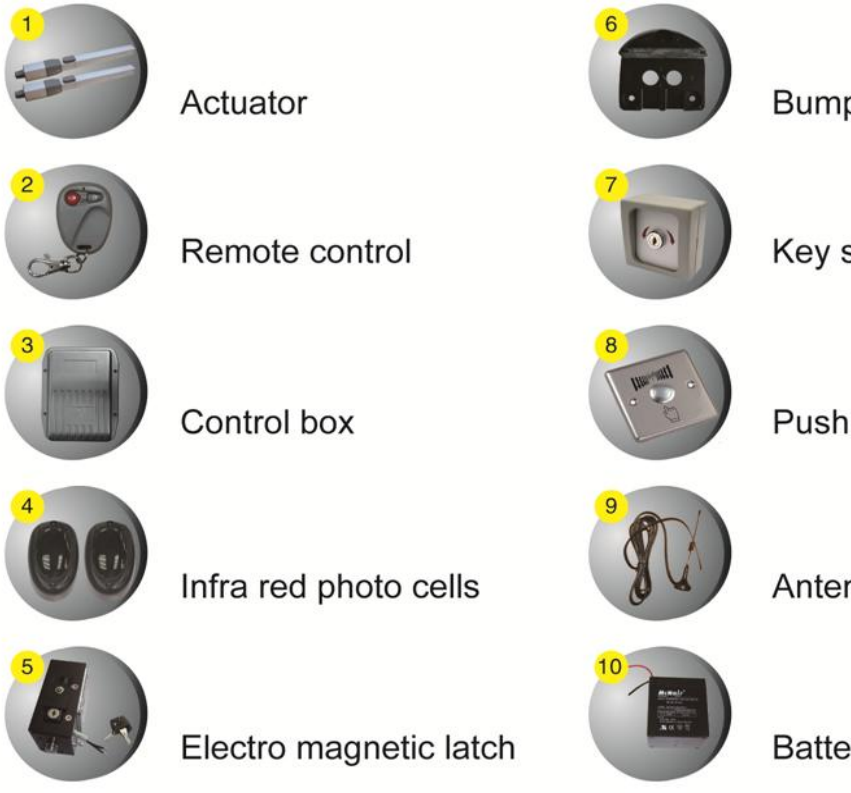
Instructions for installing SuperJack™ gateopener

SuperJack™





Superjack and Easyjack are supplied by Pro-Lec UK
H/O 202 Bloomfield Road, Brislington, Bristol, BS4 3QU
Mobile Helpline. 07831 600024.

Instructions for installing SuperJack™ gateopener

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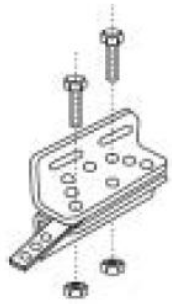
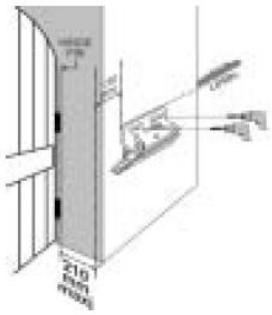
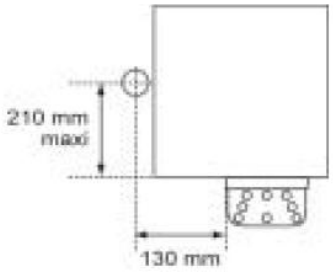
Instruction of Installation:

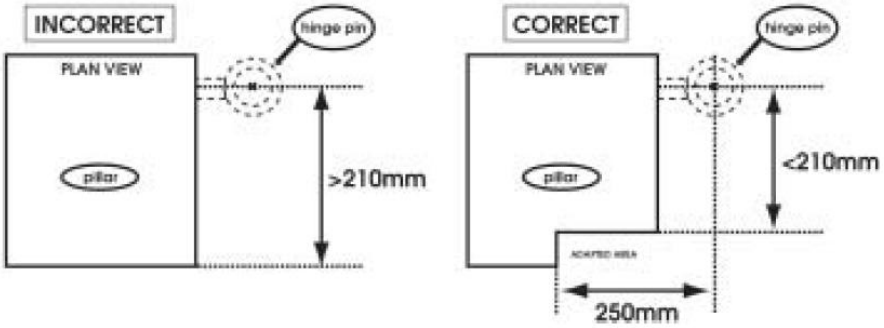
1. Assemble the metal fixing brackets for the gate pillars.
   And then fix the bracket to the pillar.



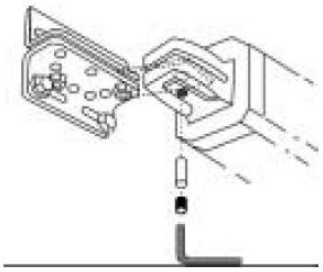




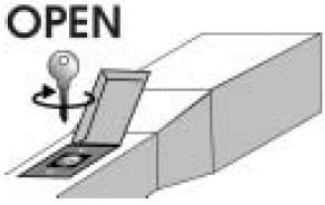
IMPORTANT:
If the hinge of your gate is more than 210mm from the edge of the pillar, it is necessary to adapt the pillar to ensures the hinge is less than 210mm from the edge of the pillar.

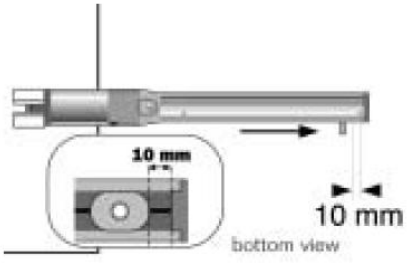


2. Fix the actuator to the fixing bracket.



3. Unlock the actuator and adjust the stem of the actuator.
   Normally, the factory preset is already 10mm from the end of the stroke.
   If it is difficult to move the stem by hand, drive it electrically to avoid damage to the gate or kit.





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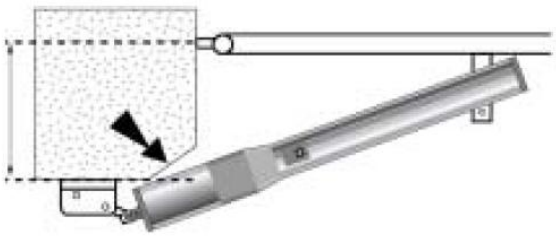
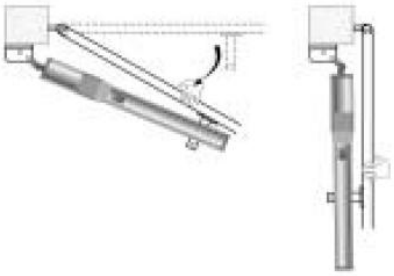
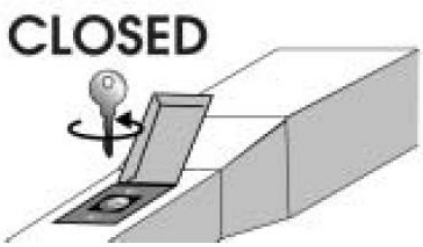
4. Fix the metal bracket on the gate and check that the actuator does not touch the pillar.
   If this is the case, it will be necessary to make a notch in the corner of the pillar.

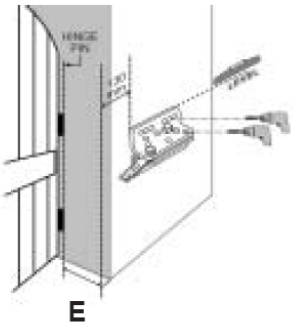


5. Test the opening of the gate manually. It must move freely by itself.
   If not, you must insert the stem of the actuator in another hole of the fixing bracket.
   If no problems exists lock the actuator.

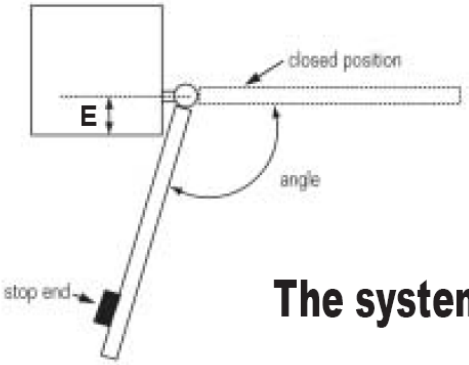




6. The position of the stop ends depends on the distance (E) of the gate hinge from
   the edge of the pillar. The table below gives the position of the stop end according to (E).

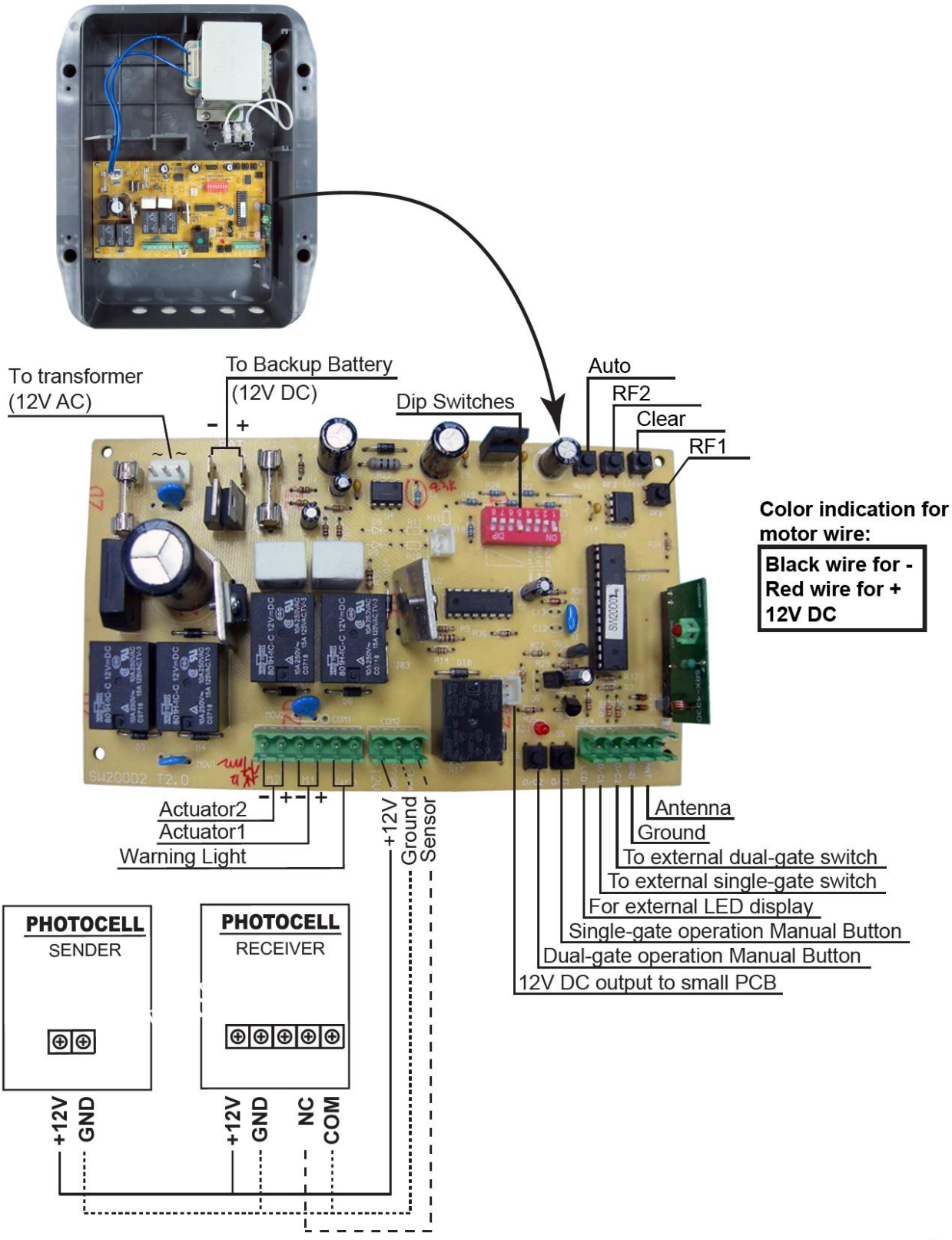


E	angle
E<12mm	120°
12mm<E<67mm	110°
67mm<E<123mm	100°
123mm<E<210mm	90°



The system is ready to program and operate.

Connection Diagram:



AC Wiring :

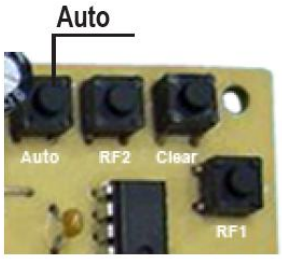
Inside of the control box, the wiring should be like the photo on the left.

Opening / Closing Learning:

Please proceed this function before using this product, otherwise the system will drive the gates improperly. E.g.: The gate can't close completely or can't open to the intended degree with some stroke length left unused.

To activate this function, press "Auto" button on the PCB for 3 seconds while the PCB is on. After release the "Auto" button, it will enter the opening/closing learning mode as below:

1. The system will close the gates first.
   Please remove any obstacle that could possibly block the gate.
   Before the actuators start, the warning light will blink for 3 seconds.
   Then Actuator 2 will close first, and then Actuator 1 will close 1 second later.
2. After 3 seconds, Actuator 1 will open the gate 1 fully,
   waiting for 3 seconds, Actuator 2 will open the other gate 2 fully.
3. After 3 seconds Actuator 2 will close fully first, waiting for 3 seconds, Actuator 1 will close fully.
4. System repeats the actions of point 2 and 3 one more time.
5. After 3 seconds, the system checks operation of Actuator 1 and Actuator 2 together.
6. After learning process succeeds, the system is ready for use.
   If the system blinks after this learning mode, which means the learning is in vain, please make sure that there's no obstacle on the way, then try again to trigger the learning mode.

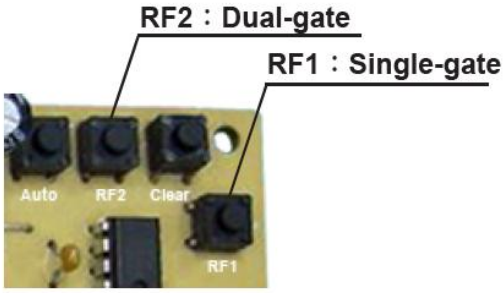


NOTE:
The Opening/Closing Learning couldn't be done successfully due to the over-weight of the gates. Then, the Current Limit needs to be adjusted. Please refer to P7 of this manual. If any assistance is needed, please contact the technicians of our agent.

Remote Learning (activation of remote control for single-gate or dual-gate):
To activate the remote control service, carry out the following steps:

A. RF dual-gate learning: (dual-gate operation)

1. Press "RF2" key on the PCB for over 2 seconds whilst the PCB is powered.
2. You'll see the LED light go out (learning mode entered), press any key on the remote control, LED will now blink 3 times (learning succsessful) If the light is off after 10 seconds without flashing (learning has failed, try the whole process again).
3. Please repeat steps 1 and 2 to activate another remote control.



B. RF single-gate learning: (single-gate operation)
Press "RF1" key on the PCB and another key on the remote control as in steps 1~3 above.

Note: Up to 8 different RF remote control keys can be learnt for each function by the system.

Remote Control:

Choose a key to programme.

The remote control has 2 buttons on it. Choose two of them to start RF learning for single-gate and dual-gate operation separately.

Operation (open, close and stop) by remote control:

The remote operation is very simple: one key press will open the gate, next press to stop, next to close the gate, next to stop...and so on.

When opening the gates:
1. Warning light will blink for 3 seconds, then Actuator 1 opens, 4 seconds later Actuator 2 opens.
2. If the gate hits something, Actuators will reverse for 3 seconds, and the warning light will blink until the next command is received.

When closing the gates:
1. Warning light will blink for 3 seconds then Actuator 2 closes, 4 seconds later Actuator 1 closes.
2. If the gate hits something, Actuators will reverse for 3 seconds and the warning light will blink until next command received.

Remark: The gate operation works properly only after successful Opening/Closing Learning.

Photocell (Optional):

1. During Opening:
When the loop of photocells has been interupted, system will:
A. ignore, if the Actuator 1 has been activated. OR
B. stop, if the Actuator 1 hasn't been activated yet.
2. During Closing:
When the loop of photocells has been intercepted, system will stop closing the gates and then open both gates simultaneously until the set position.

Auto close:

30 seconds or 60 seconds later (only when this function is enabled, depends on your setting of key 1 of dip switch), warning light will blink for 3 seconds then Actuator 2 closes, 4 seconds later Actuator 1 closes. When the process finished, warning light will be switched off.

Manual gate control on the PCB:

1. The operation is the same as remote: one key press will open the gate, next press to stop, next to close the gate, next to stop...and so on.
2. Optional handset or external wall button is available. (Connected to O/C & GND terminals)

Clear RF memory:

Press the "Clear" key on the PCB for over 2 seconds while the PCB is on.
You'll see the LED blinking for 2.5 seconds and so the RF memory has been cleared.

Reset:

Press "Clear" key on the PCB and turn on AC power; keep pressing "Clear" key for over 2 seconds.
You'll see the LED blink for 5 times and be on.
Once the mentioned actions have been carried out, all RF data will be cleared.

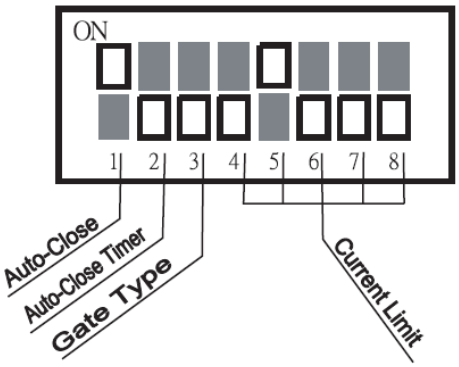
Quick release:

Use the Key to unlock the actuator to move the gates manually.

Clutch adjustment:

The SW430 series features a clutch mechanism inside the actuator as an additional protection.
Any adjustment for the clutch requires professional assistance.

Settings of Dip Switches:



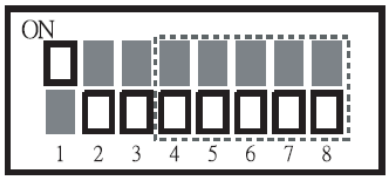
The default setting of dip switches.

Key No.	Function	ON	OFF
1	Auto-Close	Yes	No
2	Auto-Close Timer	60 Sec	30 Sec
3	Gate Type	Heavy Gate	Light Gate
4~8	Current Limit	selected	unselected

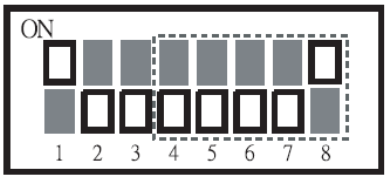
NOTE:
The current limit setting could be needed to adjustment according the weight of the gates during Opening/Closing Learning.

Approx. current limit values for different dip switch setting:

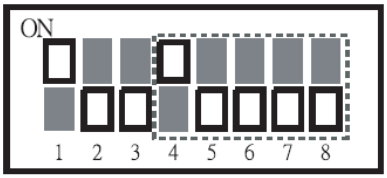
switch 4	switch 5	switch 6	switch 7	switch 8	All off
1.0A	2.0A	3.0A	3.7A	4.5A	5.2A



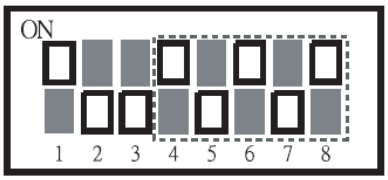
Maximum Current Limit (This is max power and should not be needed, if set to this unnecessarily you could shorten the life of motor, Essentially try lower current limit first)



Second Highest Current Limit

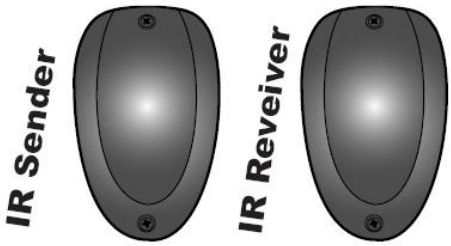


Minimum Current Limit



When the user switches several of these switches on,
for safety reasons the system will choose the lowest
current limit setting automatically. (switch 4instead of switch 6 or 8)

Optional Accessories:



1 Set of Photocells

Operation of Photocells:

Select a proper installation site, where the sender and receiver can be along the same line and at the same height. Connect to the opener's PCB as wiring diagram above. Power on the system, try and see if it works properly by interrupting the IR between the sender and receiver for times. The relay in the receiver should respond accordingly while LED switches ON and OFF.

With photocell properly installed, when triggered during opening the gates, the gates will ignore the interruption and open. When triggered during closing the gates, the gates will stop closing and the gates will both open simultaneously to the set position.

Specifications:

Model	**EasyJack Swing gate opener**
Power supply	**230VAC +/- 10%, 50Hz.**
Power motor	**12VDC**
Stroke lengths	**350 mm.**
Operation time	**Approx 15 seconds**
Open range	**120°**
Duty cycle	**20%**
Operation temperature	**-20°C - +65°C**
Fuses	**Yes**
backup battery	**Yes (optional, 12V, 7Ah.)**
Automatic closing	**Adjustable (30 of 60 seconds)**
Extra connections	**Warning lamp. infra red photocell, battery**
RF Carriage	**433.92 MHz**
Control Range	**About 30 – 50 meter**

Connections on the PCB for the accessories for the SuperJack

Pushbutton and key switch (both wires together)

1 wire on GND
. other wire on O/C1 connection (1 wing)
. other wire on O/C2 connection (2 wings)

Warning lamp (option)
. 1 wire on – (minus) connection- on “warn”
. 1 wire on + (plus) connection – on “warn”

Battery
. connect the 2 wires on the 2 pins (- and +) see drawing page 11

please mind : red color is plus + and black wire is – (minus)
if the wires are changed the PCB will be destroyed and cannot be repaired

Antenna:
. inner cable of the antenna wire to connect on “Ant”
.middle wire to connect in – GND connection

Electric-magnetic lock and stopper

. first step is to learn the actuators and the whole system
And then to connect the wires for the lock as below:

for gate openers to swing inside:

. 1 wire of the lock on the + (plus) connection from the M2
other wire on the – (minus) connection Com/GND

for gate opener to swing outside:

. the red wires from the actuators to connect on the (minus) – connection (M1 and M2)
. the black wires of the actuators to connect on the + (plus) connection (M 1 and M2)
. 1 wire of the lock on the + connection of the actuators 2 (+m2 connection)
other wire from the lock on the – (minus) connection (Com/GND).